February 10, 2003
Supersedes January 01, 2003

BEFORE SUBMITTING YOUR BID

1. **Use pen and ink to complete the Bid.**

2. **Have you signed and completed the Contract Agreement, Offer & Award Forms?**

3. **As a minimum, the Bidder will submit a Bid Package consisting of the Notice to Contractors, the completed Acknowledgement of Bid Amendments & Submission of Bid Bond Validation Number form, the completed Schedule of Items, 2 copies of the completed Agreement, Offer, & Award form, a Bid Bond or Bid Guarantee, and any other Certifications or Bid Requirements listed in the Bid Book.**

4. **Have you included prices for all Bid Items? ("Zero is not considered a bid price.")**

5. **Have you included a bid guarantee? Acceptable forms are:**

   A. **Bid Bond on the Department's prescribed form for 5% of the Bid Amount. (Or forms that do not contain any significant variations from the Department's forms as solely determined by the Department.)**

   B. **Official Bank Check, Cashier's Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors.**

6. **If the written Bid is to be sent, Federal Express overnight delivery is suggested as the package is delivered directly to the DOT Headquarters Building in Winthrop. Other means, such as U.S. Postal Services' Express Mail has proven not to be reliable.**

AND FOR FEDERAL AID PROJECTS

7. **Have you included your DBE Utilization commitment in the proper amounts and signed the DBE Certification?**

If you need further information regarding Bid preparation, call the DOT Contracts Section at (207)624-3430.

For complete specifications regarding bidding requirements, refer to Section 102 of the Maine Department of Transportation, Standard Specifications, Revision December 2002.

February 11, 2003

NOTICE

The Maine Department of Transportation is attempting to improve the way Bid Amendments/Addendums are handled, and allow for an electronic downloading of bid packages from our website, while continuing to maintain a planholders list.

Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments, must provide an email address to Diane Barnes at the MDOT Contracts mailbox at: MDOT.contracts@maine.gov. Each bid package will require a separate request. Please provide us an email address, so we can maintain the planholders list that both the industry and MDOT uses.

Additionally, the new Acknowledgement of Bid Amendment form will be placed in MDOT bid packages beginning with the 2/12/03 advertisements. After that date, interested parties will be responsible for reviewing and retrieving the Bid Amendments from our web site, and acknowledging receipt and incorporating those Bid Amendments in their bids.

The downloading of bid packages from the MDOT website is not the same as providing an electronic bid to the Department. Electronic bids must be submitted via **http://www.BIDX.com**. For information on electronic bidding contract Rebecca Pooler at **rebecca.pooler@maine.gov**.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Bid Guaranty-Bid Bond Form

KNOW ALL MEN BY THESE PRESENTS THAT_____

_____, of the City/Town of _____and State of_____

as Principal, and _____as Surety, a

Corporation duly organized under the laws of the State of_____and having a usual place of

Business in _____and hereby held and firmly bound unto the Treasurer of

the State of Maine in the sum of_____,for payment which Principal and Surety bind

themselves, their heirs, executers, administrators, successors and assigns, jointly and severally.

The condition of this obligation is that the Principal has submitted to the Maine Department of Transportation, hereafter Department, a certain bid, attached hereto and incorporated as a part herein, to enter into a written contract for the construction of _____

_____

_____and if the Department shall accept said bid and the Principal shall execute and deliver a contract in the form attached hereto (properly completed in accordance with said bid) and shall furnish bonds for this faithful performance of said contract, and for the payment of all persons performing labor or furnishing material in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be null and void; otherwise it shall remain in full force, and effect.

Signed and sealed this_____day of _____20_____

WITNESS:

_____

_____

_____

PRINCIPAL:

By_____

By:_____

By:_____

WITNESS

_____

_____

_____

SURETY:

By_____

By:_____

Name of Local Agency: _____

NOTICE

For security and other reasons, all Bid Packages which are mailed, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open
PIN:
Town:
Date of Bid Opening:
Name of Contractor with mailing address and telephone number:

In Addition to the usual address information, the *Outer Envelope* should have written or typed on it:

Double Envelope: Bid Enclosed
PIN:
Town:
Date of Bid Opening:
Name of Contractor:
This should not be much of a change for those of you who use Federal Express or similar services.

Hand-carried Bids may be in one envelope as before, and should be marked with the following infrormation:

Bid Enclosed: Do Not Open
PIN:
Town:
Name of Contractor:

INSTRUCTIONS FOR PREPARING THE CONTRACTOR'S DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION PLAN

The Contractor Shall:

1. Submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan to the Contract's Engineer by 4:30 P.M. on the Bid day.

2. Extend equal opportunity to MDOT certified DBE firms (as listed in MDOT's DBE Directory of Certified Businesses) in the selection and utilization of Subcontractors and Suppliers.

SPECIFIC INSTRUCTIONS FOR COMPLETING THE FORM:

Insert Contractor name, the name of the person(s) preparing the form, and that person(s) telephone and fax number.

Provide total Bid price, Federal Project Identification Number, and location of the Project work.

In the columns, name each DBE firm to be used, provide the Unit or Item cost of the Work/Product to be provided by the DBE firm, give a brief description of the Work, and the dollar value of the Work.

If no DBE firm is to be utilized, the Contractor must document the reason(s) why no DBE firms are being used. Specific supporting evidence of good faith efforts taken by Contractors to solicit DBE Bidders must be attached. This evidence, as a minimum, includes phone logs, e-mail and/or mail DBE solicitation records, and the documented results of these solicitations.

NOTICE

The Department has revised the Disadvantaged Business Enterprise Proposed Utilization form and the procedure that has been used for the past several months for Contractors to submit the form.

The Apparent Low Bidder now must submit the form by close of Business (4:30 P.M.) on Bid day.

The new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form contains additional information that is required by USDOT.

The Disadvantaged Business Enterprise Proposed Utilization Plan form will no longer be used. The new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form must be used.

A copy of the new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan and instructions for completing it are attached.

Note: Questions about DBE firms, or to obtain a printed copy of the DBE Directory, contact Equal Opportunity at (207) 624-3066.

MDOTs DBE Directory of Certified firms can also be obtained at http://www.state.me.us/mdot/humnres/o_equalo/cdwbed_h.htm

NOTICE

Bidders:

Please use the attached “Request for Information” form when faxing questions and comments concerning specific Contracts that have been Advertised for Bid. Include additional numbered pages as required.

State of Maine
Department of Transportation

REQUEST FOR INFORMATION

Date _____ Time _____

Information Requested: **PIN: _____ Town(s): _____**

Request by: _____ Phone: (_____)_____
Bid Date: _____ Fax: (_____)_____

Complete top portion of form and transmit to the number listed in the Notice to Contractors

RFI No: _____ RFI received: _____

Response:_____

Response By:_____ Date: _____

CONTRACTOR'S DISADVANTAGED BUSINESS ENTERPRISE PROPOSED UTILIZATION PLAN

Low Bidder shall furnish completed form to Contracts Section by 4:30 P.M. on Bid Opening day.

TO: MDOT Contracts Section
16 State House Station,
Augusta, Me 04333-0016
or
Fax: 207-624-3431

Contractor: _____
Prepared by: _____

Telephone: _____ Fax: _____

BID PRICE: $_____FEDERAL PROJECT #_____LOCATION: _____

TOTAL DBE PARTICIPATION AS A PERCENT OF TOTAL BID PRICE = _____%

DBE Firm*	Unit/Item Cost	Unit #	Description of work & Item Number	Actual $ Value
			Total >	

If no DBE firm(s) are used, bidder must document efforts made to secure DBE participation and attach supporting evidence of this effort:

_____

_____.

Examples: Bidder relies wholly upon low quote subcontractor section, DBE firm(s) were not low quote. No DBE firms bid.

***Only DBE firms certified by MDOT prior to bidding can be utilized by Contractor for DBE credit. Directory of certified DBEs is available on MDOT's website: www.state.me.us/mdot**

Equal Opportunity Use:

Plan received ___/___/___ Verified by: _____ Action: _____

Office of Human Resources

Equal Opportunity

MAINE DEPARTMENT OF TRANSPORTATION

Certified Disadvantaged and Women Business Enterprise

DBE DIRECTORY - MINORITY OWNED

WBE DIRECTORY - WOMEN OWNED

WEBSITE FOR DIRECTORY CAN BE FOUND AT:
http://www.state.me.us/mdot/humnres/o_equalo/cdwbed_h.htm

It is the responsibility of the Contractor to access the DBE Directory at this site in order to have the most current listings.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
NOTICE TO CONTRACTORS

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bids for building Wetlands Mitigation in the town of **Phillips**" will be received from contractors at the Reception Desk, Temporary Transportation Building in Winthrop, Maine, until 11:00 o'clock A.M. (prevailing time) on **June 25, 2003**, and at that time and place publicly opened and read. **There will be a Statement of Bidders Qualifications submittal required by the Department, as specified in the contract documents Special Provision 103.3 Post-Bid Qualification for all bidders for this project**. All other Bids will be rejected. **MDOT is currently transitioning to provide for the option of electronic bidding. We now accept electronic bids for those bid packages posted on our electronic bid website. Electronic bids do not have to be accompanied by paper bids. However, during this transition, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence. For those who chose to submit a paper bid alone, nothing has changed.**

Description: Maine Federal Aid Project No. NH-4329(40)E, PIN. 4329.40

Location: In Franklin County, project is located off of Rte.2 in Phillips at three locations on the South Branch of the Sandy River.

Outline of Work: River restoration and mitigation, planting trees and shrubs, and other incidental work.

For general information regarding Bidding and Contracting procedures, contact Bruce Carter at (207)624-3430. Our webpage at http://www.state.me.us/mdot/project/design/homepg.htm contains a copy of the schedule of items, Plan Holders List, written portions of bid amendments (not drawings), and bid results. For Project-specific information fax all questions to **Project Manager Deane VanDusen** at (207)624-3101. Questions received after 12:00 noon of Monday prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. Hearing impaired persons may call the Telecommunication Device for the Deaf at (207)287-3392.

Plans, specifications and bid forms may be seen at the Maine Department of Transportation, Temporary Transportation Building in Winthrop, Maine and at the Department of Transportation's Division VII Office in Dixfield. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn.: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207)624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Full size plans $20.00 ($23.00 by mail). Half size plans $10.00 ($12.00 by mail), Bid Book $10 ($13 by mail), Single Sheets $2, payment in advance, all non-refundable.

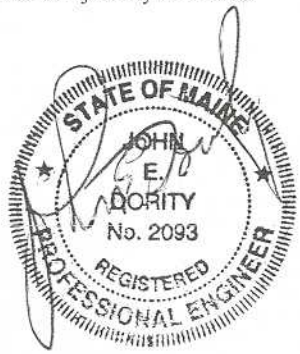
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of $5,000.00 payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder.

This Contract is subject to all applicable Federal Laws. This contract is subject to compliance with the Disadvantaged Business Enterprise program requirements as set forth by the Maine Department of Transportation.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002", price $10 [$13 by mail], and Standard Details, Revision of December 2002, price $20 [$25 by mail] **as updated through the advertisement date for this project**. Standard Detail updates can be found at http://www.state.me.us/mdot/project/design/homepg.htm

The right is hereby reserved to the MDOT to reject any or all bids.

Winthrop, Maine
June 18, 2003



JOHN E. DORITY
CHIEF ENGINEER

Phillips
4329.40
June 9, 2003

ACKNOWLEDGMENT OF BID AMENDMENTS
&
SUBMISSION OF BID BOND VALIDATION NUMBER (IF APPLICABLE)

With this form, the Bidder acknowledges its responsibility to check for all Amendments to the Bid Package. For each Project under Advertisement, Amendments are located at http://www.state.me.us/mdot/project/design/schedule.htm. It is the responsibility of the Bidder to determine if there are Amendments to the Project, to download them, and to incorporate them into their Bid Package. The Maine DOT will not post Bid Amendments any later than noon the day before Bid opening.

Amendment Number	Date

The Contractor, for itself, its successors and assigns, hereby acknowledges that it has received all of the above referenced Amendments to the Bid Package. Failure to acknowledge receipt of all Amendments to the Bid Package will be considered a Non-curable Bid Defect in accordance with Section 102.11.1 of the Standard Specifications, Revision of December 2002.

CONTRACTOR

_____ _____
Date Signature of authorized representative

_____
(Name and Title Printed)

Bid Bond Validation Number _____
(Applicable to annual bid bonds or electronic bid bonds.)

CONTRACT ID: 004329.40 PROJECT(S): NH-4329(40)E

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 MITIGATION ITEMS					
0010	201.11 CLEARING	0.250 AC				
0020	203.20 COMMON EXCAVATION	780.000 CY				
0030	203.25 GRANULAR BORROW	60.000 CY				
0040	203.26 GRAVEL BORROW	50.000 CY				
0050	603.911 60" X 38" RCP ELLIPTICAI CULVERT PIPE	40.000 LF				
0060	606.17 GUARDRAIL TYPE 3B - SINGLE RAIL	75.000 LF				
0070	606.35 GUARDRAIL DELINEATOR POST	4.000 EA				
0080	606.78 LOW VOLUME GUARDRAIL ENDS - TYPE 3	4.000 EA				
0090	610.09 HAND LAID RIPRAP - CULVERT PROTECTION	32.000 CY				
0100	610.10 VEGETATED RIPRAP	105.000 CY				

CONTRACT ID: 004329.40 PROJECT(S): NH-4329(40)E

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0110	610.18 STONE DITCH PROTECTION	30.000 CY				
0120	610.21 RIVER STONES - RIFFLES	45.000 CY				
0130	615.07 LOAM	145.000 CY				
0140	618.1401 SEEDING METHOD NUMBER 2 - PLAN QUANTITY	14.000 UN				
0150	619.1201 MULCH - PLAN QUANTITY	14.000 UN				
0160	619.1401 EROSION CONTROL MIX	125.000 CY				
0170	620.58 EROSION CONTROL GEOTEXTILE	80.000 SY				
0180	621.01 EVERGREEN TREES (8 INCH - 12 INCH)	139.000 EA				
0190	621.245 LARGE DECIDUOUS TREES (2 FOOT - 3 FOOT) GROUP A	111.000 EA				
0200	621.54 DECIDUOUS SHRUBS (18 INCH - 24 INCH) GROUP A	2655.000 EA				
0210	621.80 ESTABLISHMENT PERIOD	LUMP	LUMP			

CONTRACT ID: 004329.40 PROJECT(S): NH-4329(40)E

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0220	629.05 HAND LABOR, STRAIGHT TIME	89.000 HR				
0230	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	82.000 HR				
0240	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	67.000 HR				
0250	631.18 CHAIN SAW RENTAL (INCLUDING OPERATOR)	14.000 HR				
0260	637.071 DUST CONTROL	LUMP	LUMP			
0270	652.34 CONE	20.000 EA				
0280	652.35 CONSTRUCTION SIGNS	100.000 SF				
0290	652.361 MAINTENANCE OF TRAFFIC CONTROL DEVICES	LUMP	LUMP			
0300	652.38 FLAGGER	16.000 HR				
0310	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP	LUMP			
0320	659.10 MOBILIZATION	LUMP	LUMP			

SCHEDULE OF ITEMS REVISED:

CONTRACT ID: 004329.40 PROJECT(S): NH-4329(40)E

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 TOTAL					
	TOTAL BID					

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at 1705 U.S. Route 202, Winthrop, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and _____
a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at _____

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. **4329.40** for the **Wetlands Mitigation** in the town of **Phillips**, County of **Franklin**, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **August 30, 2003.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is **$**_____
Performance Bond and Payment Bond each being 100% of the amount awarded under this Contract (see award amount in Section G below).

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.

2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.

3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **PIN 4329.40 - Phillips - Wetlands Mitigation,** State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work on the date specified in the Engineer's "Notice to Commence Work" as stated in Section 107.2 of the Standard Specifications Revision of December 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

_____	_____
Date	(Signature of Legally Authorized Representative of the Contractor)
_____	_____
Witness	(Name and Title Printed)

G. Award.

Your offer is hereby accepted. This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

_____	_____
Date	By: David A. Cole, Commissioner
_____	
Witness	

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at 1705 U.S. Route 202, Winthrop, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and _____
a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at _____

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. **4329.40** for the **Wetlands Mitigation** in the town of **Phillips**, County of **Franklin**, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **August 30, 2003.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is **$**_____
Performance Bond and Payment Bond each being 100% of the amount awarded under this Contract (see award amount in Section G below).

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.

2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.

3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **PIN 4329.40 - Phillips - Wetlands Mitigation,** State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work on the date specified in the Engineer's "Notice to Commence Work" as stated in Section 107.2 of the Standard Specifications Revision of December 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

_____	_____
Date	(Signature of Legally Authorized Representative of the Contractor)
_____	_____
Witness	(Name and Title Printed)

G. Award.

Your offer is hereby accepted. This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

_____	_____
Date	By: David A. Cole, Commissioner
_____	
Witness	

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at 1705 U.S. Route 202, Winthrop, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and **(Name of the firm bidding the job)** a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at **(address of the firm bidding the job)**

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. **1224.00**, for the **Hot Mix Asphalt Overlay** in the town/city of **West Eastport**, County of **Washington**, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **November 15**, 2003**.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is **____(Place bid here in alphabetical form such as One Hundred and Two dollars and 10 cents)_____ $_ (repeat bid here in numerical terms, such as $102.10)_____** Performance Bond and Payment Bond each being 100% of the amount of this Contract.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.

2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.

3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN 1234.00 West Eastport, Hot Mix Asphalt Overlay,

State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work on the date specified in the Engineer's "Notice to Commence Work" as stated in Section 107.2 of the Standard Specifications Revision of 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

_____	**(Sign Here)**
Date	(Signature of Legally Authorized Representative of the Contractor)
____(**Witness Sign Here)** _____	**(Print Name Here)**
Witness	(Name and Title Printed)

G. Award.

Your offer is hereby accepted. This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

_____	_____
Date	By: David A. Cole, Commissioner
_____	
(Witness)	

BOND # _____

CONTRACT PERFORMANCE BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____ _____ **and the State of** _____, as principal, and……..., a corporation duly organized under the laws of the State of ..... and having a usual place of business ...., as Surety, are held and firmly bound unto the Treasurer of the State of Maine in the sum of _____ **and 00/100 Dollars ($)**, to be paid said Treasurer of the State of Maine or his successors in office, for which payment well and truly to be made, Principal and Surety bind themselves, their heirs, executors and administrators, successors and assigns, jointly and severally by these presents.

The condition of this obligation is such that if the Principal designated as Contractor in the Contract to construct Project Number _____ in the Municipality of _____ promptly and faithfully performs the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the State of Maine.

Signed and sealed this ..... day of ....., 20…. .

WITNESSES:	SIGNATURES: CONTRACTOR:
Signature.....	.....….....
Print Name Legibly	Print Name Legibly ...….....
	SURETY:
Signature	....….....
Print Name Legibly	Print Name Legibly .....
SURETY ADDRESS:	NAME OF LOCAL AGENCY:
.....	ADDRESS .....
.....	..….....
.....	.....….....
TELEPHONE.....	.....….....

BOND # _____

CONTRACT PAYMENT BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____ _____ **and the State of** _____, as principal, and.....…..... a corporation duly organized under the laws of the State of ..... and having a usual place of business in .....……., as Surety, are held and firmly bound unto the Treasurer of the State of Maine for the use and benefit of claimants as herein below defined, in the sum of _____ **and 00/100 Dollars ($)** for the payment whereof Principal and Surety bind themselves, their heirs, executors and administrators, successors and assigns, jointly and severally by these presents.

The condition of this obligation is such that if the Principal designated as Contractor in the Contract to construct Project Number _____ in the Municipality of _____ promptly satisfies all claims and demands incurred for all labor and material, used or required by him in connection with the work contemplated by said Contract, and fully reimburses the obligee for all outlay and expense which the obligee may incur in making good any default of said Principal, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material or both, used or reasonably required for use in the performance of the contract.

Signed and sealed this ..... day of ...……....., 20 ... .

WITNESS:	SIGNATURES:
	CONTRACTOR:
Signature…….....	.....….....
Print Name Legibly .....…….	Print Name Legibly …....
	SURETY:
Signature.....	...….....
Print Name Legibly	Print Name Legibly …....
SURETY ADDRESS:	NAME OF LOCAL AGENCY:
...….....	ADDRESS ….....
.....	……....
TELEPHONE	……....

CONSTRUCTION NOTES

NH-4329(00)E
Phillips

General - Change all town references from Dixfield to Phillips.

Plans Make the following changes to the plans sheets:

Sheet 1 of 8 (Title Sheet)

- Change the title from Dixfield to Phillips

Sheet 2 of 8 (Materials and Quantities)

- Add Item # 203.23 - Gravel Borrow; 35 yd^3 at Pole 19 and 15 yd^3 at Upstream Culvert. Total 50 yd^3

- Delete Item # 610.07 - Stone Fill (Roadway)

- Change the quantity of Item # 621.54 - Deciduous Shrubs on Pole 19 to 2040 Ea and the Total quantity to 2655 Ea. 1405 of these are as described on Sheet 4 of 8 (Pole 19 Site - Restoration Plan) and Sheet 7 of 8 (Culvert Site - Restoration Plan). The remaining plants are *Salix discolor* - *Pussy Willow*. 925 at the Pole 19 Site, 145 at the Culvert Site, and 180 at the Downstream Culvert Site.

Sheet 3 of 8 (Pole 19 Site - Design)

- Add the following as Note #7: Temporary construction access to the Pole Site shall be provided by the Contractor. The access road will be to the East of Pole 19 and run North to the South Branch of the Sandy River. The specific location will be determined at the Pre-Construction meeting.

Sheet 4 of 8 (Pole 19 Site - Restoration Plan)

- Delete all references to plant sizes. Refer to Sheet 2 of 8 for plant sizes.

Sheet 7 of 8 (Culvert Site - Restoration Plan)

- Delete all references to plant sizes. Refer to Sheet 2 of 8 for plant sizes.

Item # 621 - All plant materials shall be containerized.

Item # 652 - Maintenance of Traffic

- Add the following; Road Access Maintenance: Minimum road with shall be maintained during workings hours to accommodate emergency vehicles and a 12'-0" width shall be maintained during non-working hours.

GENERAL DECISION ME030009 06/13/03 ME9
 General Decision Number ME030009

 Superseded General Decision No. ME020009

 State: Maine

 Construction Type:
 HIGHWAY

 County(ies):
 AROOSTOOK KNOX SAGADAHOC
 FRANKLIN LINCOLN SOMERSET
 HANCOCK OXFORD WALDO
 KENNEBEC PISCATAQUIS YORK

 HIGHWAY CONSTRUCTION PROJECTS excluding major bridging (for example: bascule, suspension and spandrel arch bridges; those bridging waters presently navigating or to be navigatable; and those involving marine construction in any degree); tunnels, building structures in rest area projects and railroad construction.

 Modification Number Publication Date
 0 06/13/2003

COUNTY(ies):
AROOSTOOK KNOX SAGADAHOC
FRANKLIN LINCOLN SOMERSET
HANCOCK OXFORD WALDO
KENNEBEC PISCATAQUIS YORK

 ENGI0004V 04/01/2003

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
Pavers	16.51	6.00
Rollers	16.51	6.00

 SUME4024A 10/24/2000

	Rates	Fringes
CARPENTERS	11.60	1.51
IRONWORKERS		
Structural	12.03	1.58
LABORERS		
Drillers	10.00	2.50
Flaggers	6.00	
Guardrail Installers	7.92	
Landscape	7.87	.16
Line Stripper	8.69	.23
Pipelayers	9.21	2.31
Rakers	9.00	1.51
Sign Erectors	10.00	
Unskilled	8.66	1.38
Wheelman	8.50	.43
POWER EQUIPMENT OPERATORS		
Backhoes	11.87	2.05

Bulldozers	12.33	2.88
Cranes	14.06	1.75
Excavators	12.38	2.48
Graders	13.06	3.73
Loaders	11.41	2.87
Mechanics	13.18	2.57
TRUCK DRIVERS		
Dump	9.35	3.10
Tri axle	8.70	1.18
Two axle	8.56	2.19

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request

review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the

interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

PIN 004329.40
Dixfield
February 3, 2003

SPECIAL PROVISION
SECTION 103.3
Post-bid Qualification
(Statement of Bidder's Qualification)

As part of the submitted Bid, each Bidder shall demonstrate to the satisfaction of MEDOT the experience of the firm and/or subcontractor who will be implementing the stream restoration construction on the Contract. Written documentation of all such experience shall be provided with the Bid to the MEDOT. Bidder shall furnish a list of all wetland mitigation and stream restoration projects, including the name of the owner for whom the work was performed, the total construction cost of each project, and the name(s) of the Bidder's subcontractor's, project superintendent(s) and assistant superintendents(s) who had direct supervisory responsibility for the project listed. Said experience shall include, as a minimum, at least one (1) bioengineering bank stabilization project and one (1) culvert installation project within the last five (5) years of equal or greater size and complexity as the work required by this Contract.

A statement of the bidder's qualifications, experience record in constructing the type of improvements embraced in the Contract, and personnel and equipment available for the work contemplated shall be included in the proposal.

When specifically requested by MEDOT, the Bidder shall submit a detailed financial statement. The MEDOT shall have the right to take such steps, as deems necessary to determine the ability of the bidder to perform its obligations under the Contract. The Bidder shall furnish MEDOT all such information and data for this purpose, as it may request. MEDOT reserves the right to reject any bid where an investigation of the available evidence of information does not satisfy MEDOT that the Bidder is qualified to properly carry out the terms of the Contract.

Town: **Dixfield**
Project: **NH-4329(40)E, 4329.40**
Date: **March 6, 2003**

SPECIAL PROVISIONS
SECTION 104
Utilities

MEETING

A Preconstruction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications **is** required.

GENERAL INFORMATION

These Special Provisions outline the arrangements that have been made by the Department for utility work to be undertaken in conjunction with this project. The following list identifies all known utilities having facilities presently located within the limits of this project or intending to install facilities during project construction

.

Overview:

Utility	Aerial	Underground	Railroad
Somerset Telephone Company	√	√	
Central Maine Power Company	√		

Temporary utility adjustments are **not** anticipated.

Unless otherwise specified, any underground utility facilities shown on the project plans represent approximate locations gathered from available information. The Department cannot certify the level of accuracy of this data. Underground facilities indicated on the topographic sheets (plan views) have been collected from historical records and/or on-site designations provided by the respective utility companies. Underground facilities indicated on the cross-sections have been carried over from the plan view data and may also include further approximations of the elevations (depths) based upon straight-line interpolation from the nearest manholes, gate valves, or test pits.

All adjustments are to be made by the respective utility/railroad unless otherwise specified herein.

All clearing and tree removal in areas where utilities are involved must be completed before the utilities are able to relocate their facilities.

Town: **Dixfield**
Project: **NH-4329(40)E, 4329.40**
Date: **March 6, 2003**

AERIAL

Summary:

Utility	Pole Set	New Wires/ Cables	Trans. Wires/ Cables	Remove Poles	Estimated Working Days
Somerset Telephone Company	1		1	1	5
Central Maine Power Company			1		5
				Total:	10

Utility Specific Issues:

****Special Note to the Contractor:**
Pole # 19 Site
It is necessary for the access road, leading from No. 6 Road to the South Branch of the Sandy River, be constructed on the **north** side of Pole #19, to avoid any conflicts with a buried cable belonging to Somerset Telephone Company, which originates off Pole #19 aerial then continues underground in a southerly direction.
Any tree removal or tree trimming required within ten feet of the Central Maine Power Company conductors must be done by a contractor qualified to work within ten feet of the Central Maine Power Company conductors. A list of tree removal contractors qualified to remove trees or limbs within ten feet of Central Maine Power Company conductors may be obtained from Dennis Chadbourne and he may be reached at 828-2860 (pager 750-3802).

Somerset Telephone Company
Somerset Telephone Company will replace pole #4 with a taller pole to increase the vertical clearance to meet the minimum vertical clearance requirement of 20'.
Somerset Telephone Company will then notify Central Maine Power Company of set pole and transfer their lines upon completion of Central Maine Power's transfer.
Somerset Telephone Company will remove existing pole #4.

Central Maine Power Company
Central Maine Power Company will transfer their lines after pole #4 has been replaced and notify Somerset Telephone Company.

Town: Phillips
PIN #: 4329.40
Date: January 6, 2003

SPECIAL PROVISION
SECTION 105
General Scope of Work
(Environmental Requirements)

Instream Work shall not be allowed between the dates of September 1st and July 14th.
(Instream work is allowed from July 15th to August 30th.)

Stream Name(s) with Station #s: South Branch Sandy River; no Stationing, refer to map; 3 locations on River.
Special Conditions: none

Instream work consists of any activity conducted below normal high water mark.

All activities are prohibited (including placement and removal of cofferdams) below normal high water during the instream work window restriction, except for the following:

- Work within a sealed and dewatered cofferdam. Maintenance pumping within a sealed cofferdam is also allowed.

No construction activity, whether temporary or permanent, is allowed that completely blocks a river, stream, or brook without providing downstream flow.

The contractor shall abide by all permits and conditions.

SPECIAL PROVISION
CORRECTIONS, ADDITIONS AND REVISIONS
Standard Specifications - Revision of December 2002

SECTION 101
CONTRACT INTERPRETATION

101.2 Definitions - Closeout Documentation

Replace the sentence "A letter stating the amount….. DBE goals." with "DBE Goal Attainment Verification Form"

SECTION 102
DELIVERY OF BIDS
(Location and Time)

102.7.1 Location and Time

Add the following sentence "As a minimum, the Bidder will submit a Bid Package consisting of the Notice to Contractors, the completed Acknowledgement of Bid Amendments & Submission of Bid Bond Validation Number form, the completed Schedule of Items, 2 copies of the completed Agreement, Offer, & Award form, a Bid Bond or Bid Guarantee, and any other Certifications or Bid Requirements listed in the Bid Book."

SECTION 106
QUALITY

106.6 Acceptance Add the following to paragraph 1 of A: "This includes Sections 401 - Hot Mix Asphalt, 402 - Pavement Smoothness, and 502 - Structural Concrete - Method A - Air Content."

Add the following to the beginning of paragraph 3 of A: "For pay factors based on Quality Level Analysis, and"

SECTION 107
TIME

107.3.1 General Add the following: "If a Holiday occurs on a Sunday, the following Monday shall be considered a Holiday. Sunday or Holiday work must be approved by the Department, except that the Contractor may work on Martin Luther King Day, President's Day, Patriot's Day, the Friday after Thanksgiving, and Columbus Day without the Department's approval."

SECTION 402
PAVEMENT SMOOTHNESS

Add the following:

"402.02 Lot Size Lot size for smoothness will be 1000 lane-meters [3000 lane-feet]. A sublot will consist of 20 lane-meters [50 lane-feet]. Partial lots will be included in the previous lot if less than one-half the size of a normal lot. If greater than one-half the normal lot size, it will be tested as a separate lot."

SECTION 502
STRUCTURAL CONCRETE

502.0502 Quality Assurance Method A - Rejection by Resident Change the first sentence to read: "For an individual sublot with test results failing to meet the criteria in Table #1, or if the calculated pay factor for Air Content is less than 0.80……"

502.0503 Quality Assurance Method B - Rejection by Resident Change the first sentence to read: "For material represented by a verification test with test results failing to meet the criteria in Table #1, the Department will……"

502.0505 Resolution of Disputed Acceptance Test Results Combine the second and third sentence to read: "Circumstances may arise, however, where the Department may ……"

SECTION 604
MANHOLES, INLETS, AND CATCH BASINS

604.02 Materials Add the following:

"Tops and Traps	712.07
Corrugated Metal Units	712.08
Catch Basin and Manhole Steps	712.09"

SECTION 618
SEEDING

618.01 Description Change the first sentence to read as follows: "This work shall consist of furnishing and applying seed …."
Remove ",and cellulose fiber mulch" from 618.01(a).

618.03 Rates of Application In 618.03(a), remove the last sentence and replace with the following: "These rates shall apply to Seeding Method 2, 3, and Crown Vetch."

618.09 Construction Method In 618.09(a) 1, sentence two, replace "100 mm [4 in]" with "25 mm [1 in] (Method 1 areas) and 50 mm [2 in] (Method 2 areas)"

SECTION 620
GEOTEXTILES

620.03 Placement Section (c)

Title: Replace "Non-woven" in title with "Erosion Control".
First Paragraph: Replace first word "Non-woven" with "Woven monofilament".
Second Paragraph: Replace second word "Non-woven" with "Erosion Control".

620.07 Shipment, Storage, Protection and Repair of Fabric Section (a)

Replace the third sentence with the following: "Damaged geotextiles, as identified by the Resident, shall be repaired immediately."

620.09 Basis of Payment

Pay Item 620.58: Replace "Non-woven" with "Erosion Control"
Pay Item 620.59: Replace "Non-woven" with "Erosion Control"

SECTION 712
MISCELLANEOUS HIGHWAY MATERIALS

Add the following:

"712.07 Tops, and Traps These metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials.

Gray iron castings shall conform to the requirements of AASHTO M105, Class 30, unless otherwise designated.

Carbon steel castings shall conform to the requirements of AASHTO M103/M103M. Grade shall be 450-240 [65-35] unless otherwise designated.

Structural steel shall conform to the requirements of AASHTO M183/M183M or ASTM A283/A283M, Grade B or better. Galvanizing, where specified for these units, shall conform to the requirements of AASHTO M111.

712.08 Corrugated Metal Units The units shall conform to plan dimensions and the metal to AASHTO M36/M36M. Bituminous coating, when specified, shall conform to AASHTO M190 Type A.

712.09 Catch Basin and Manhole Steps Steps for catch basins and for manholes shall conform to ASTM C478M [ASTM C478], Section 13 for either of the following material:

(a) Aluminum steps-ASTM B221M, [ASTM B211] Alloy 6061-T6 or 6005-T5.

(b) Reinforced plastic steps Steel reinforcing bar with injection molded plastic coating copolymer polypropylene. Polypropylene shall conform to ASTM D 4101.

712.23 Flashing Lights Flashing Lights shall be power operated or battery operated as specified.

(a) Power operated flashing lights shall consist of housing, adapters, lamps, sockets, reflectors, lens, hoods and other necessary equipment designed to give clearly visible signal indications within an angle of at least 45 degrees and from 3 to 90 m [10 to 300 ft] under all light and atmospheric conditions.

Two circuit flasher controllers with a two-circuit filter capable of providing alternate flashing operations at the rate of not less than 50 nor more than 60 flashes per minute shall be provided.

The lamps shall be 650 lumens, 120 volt traffic signal lamps with sockets constructed to properly focus and hold the lamp firmly in position.

The housing shall have a rotatable sun visor not less than 175 mm [7 in] in length designed to shield the lens.

Reflectors shall be of such design that light from a properly focused lamp will reflect the light rays parallel. Reflectors shall have a maximum diameter at the point of contact with the lens of approximately 200 mm [8 in].

The lens shall consist of a round one-piece convex amber material which, when mounted, shall have a visible diameter of approximately 200 mm [8 in]. They shall distribute light and not diffuse it. The distribution of the light shall be asymmetrical in a downward direction. The light distribution of the lens shall not be uniform, but shall consist of a small high intensity portion with narrow distribution for long distance throw and a larger low intensity portion with wide distribution for short distance throw. Lenses shall be marked to indicate the top and bottom of the lens.

(b) Battery operated flashing lights shall be self- illuminated by an electric lamp behind the lens. These lights shall also be externally illuminated by reflex-reflective elements built into the lens to enable it to be seen by reflex-reflection of the light from the headlights of oncoming traffic. The batteries must be entirely enclosed in a case. A locking device must secure the case. The light shall have a flash rate of not less than 50 nor more than 60 flashes per minute from minus 30 °C [minus 20 °F] to plus 65 °C [plus 150 °F]. The light shall have an on time of not less than 10 percent of the flash cycle. The light beam projected upon a surface perpendicular to the axis of the light beam shall produce a lighted rectangular projection whose minimum horizontal dimension shall be 5 degrees each side of the horizontal axis. The effective intensity shall not have an initial value greater than 15.0 candelas or drop below 4.0 candelas during the first 336 hours of

continuous flashing. The illuminated lens shall appear to be uniformly bright over its entire illuminated surface when viewed from any point within an angle of 9 degrees each side of the vertical axis and 5 degrees each side of the horizontal axis. The lens shall not be less than 175 mm [7 in] in diameter including a reflex-reflector ring of 13 mm [½ in] minimum width around the periphery. The lens shall be yellow in color and have a minimum relative luminous transmittance of 0.440 with a luminance of 2854° Kelvin. The lens shall be one-piece construction. The lens material shall be plastic and meet the luminous transmission requirements of this specification. The case containing the batteries and circuitry shall be constructed of a material capable of withstanding abuse equal to or greater than 1.21 mm thick steel [No. 18 U.S. Standard Gage Steel]. The housing and the lens frame, if of metal shall be properly cleaned, degreased and pretreated to promote adhesion. It shall be given one or more coats of enamel which, when dry shall completely obscure the metal. The enamel coating shall be of such quality that when the coated case is struck a light blow with a sharp tool, the paint will not chip or crack and if scratched with a knife will not powder. The case shall be so constructed and closed as to exclude moisture that would affect the proper operation of light. The case shall have a weep hole to allow the escape of moisture from condensation. Photoelectric controls, if provided, shall keep the light operating whenever the ambient light falls below 215 lx [20 foot candles]. Each light shall be plainly marked as to the manufacturer's name and model number.

If required by the Resident, certification as to conformance to these specifications shall be furnished based on results of tests made by an independent testing laboratory. All lights are subject to random inspection and testing. All necessary random samples shall be provided to the Resident upon request without cost to the Department. All such samples shall be returned to the Contractor upon completion of the tests.

712.32 Copper Tubing Copper tubing and fittings shall conform to the requirements of ASTM B88M Type A [ASTM B88, Type K] or better.

712.33 Non-metallic Pipe, Flexible Non-metallic pipe and pipe fittings shall be acceptable flexible pipe manufactured from virgin polyethylene polymer suitable for transmitting liquids intended for human or animal consumption.

712.34 Non-metallic Pipe, Rigid Non-metallic pipe shall be Schedule 40 polyvinylchloride (PVC) that meets the requirement of ASTM D1785. Fittings shall be of the same material.

712.341 Metallic Pipe Metallic pipe shall be ANSI, Standard B36.10, Schedule 40 steel pipe conforming to the requirements of ASTM A53 Types E or S, Grade B. End plates shall be steel conforming to ASTM A36/A36M.

Both the sleeve and end plates shall be hot dip galvanized. Pipe sleeve splices shall be welded splices with full penetration weld before galvanizing.

712.35 Epoxy Resin Epoxy resin for grouting or sealing shall consist of a mineral filled thixotropic, flexible epoxy resin having a pot life of approximately one hour at 10°C [50°F]. The grout shall be an approved product suitable for cementing steel dowels into the preformed holes of curb inlets and adjacent curbing. The sealant shall be an approved product, light gray in color and suitable for coating the surface.

712.36 Bituminous Curb The asphalt cement for bituminous curb shall be of the grade required for the wearing course, or shall be Viscosity Grade AC-20 meeting the current requirements of Subsection 702.01 Asphalt Cement. The aggregate shall conform to the requirements of Subsection 703.07. The coarse aggregate portion retained on the 2.36 mm [No. 8] sieve may be either crushed rock or crushed gravel.

The mineral constituents of the bituminous mixture shall be sized and graded and combined in a composite blend that will produce a stable durable curbing with an acceptable texture.

Bituminous material for curb shall meet the requirements of Section 403 - Hot Bituminous Pavement.

712.37 Precast Concrete Slab Portland cement concrete for precast slabs shall meet the requirements of Section 502 - Structural Concrete, Class A.

The slabs shall be precast to the dimension shown on the plans and cross section and in accordance with the Standard Detail plans for Concrete Sidewalk Slab. The surface shall be finished with a float finish in accordance with Subsection 502.14(c). Lift devices of sufficient strength to hold the slab while suspended from cables shall be cast into the top or back of the slab.

712.38 Stone Slab Stone slabs shall be of granite from an acceptable source, hard, durable, predominantly gray in color, free from seams which impair the structural integrity and be of smooth splitting character. Natural color variations characteristic of the deposit will be permitted. Exposed surfaces shall be free from drill holes or indications of drill holes. The granite slabs in any one section of backslope must be all the same finish.

The granite slabs shall be scabble dressed or sawed to an approximately true plane having no projections or depressions over 13 mm [½ in] under a 600 mm [2 ft] straightedge or over 25 mm [1 in] under a 1200 mm [4 ft] straightedge. The arris at the intersection of the top surface and exposed front face shall be pitched so that the arris line is uniform throughout the length of the installed slabs. The sides shall be square to the exposed face unless the slabs are to be set on a radius or other special condition which requires that the joints be cut to fit, but in any case shall be so finished that when the stones are placed side by side no space more than 20 mm [3/4 in] shall show in the joint for the full exposed height.

Liftpin holes in all sides will be allowed except on the exposed face.

SECTION 717
ROADSIDE IMPROVEMENT MATERIAL

717.05 Mulch Binder. Change the third sentence to read as follows:

"Paper fiber mulch may be used as a binder at the rate of 2.3 kg/unit [5 lb/unit]."

SPECIAL PROVISION
SECTION 107
TIME

The specified contract completion date is August 30, 2003.

Special Provision
Section 603
Reinforced Concrete Elliptical Pipe Culverts

Description: This work shall consist of constructing Reinforced Concrete Horizontal Elliptical pipe culverts in accordance with these specifications, the Special Detail plans and in reasonable close conformity with the lines and grades shown on the plans.

Materials: Materials shall meet the requirements specified in the flowing Subsections of Division 700 - Materials:

Joint Mortar	705.02

Elliptical pipe shall be constructed according to the requirements of AASHTO M 207-00 (ASTM c 507-98) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe.

Construction Requirements: Installation of Reinforced Concrete Elliptical Pipe Culverts shall be according to the requirements of the following Subsections of Section 603 - Pipe Culverts and Storm Drains:

Excavation	603.031
Bedding	603.032
Backfilling Culverts and Storm Drains	603.08

Laying Culvert:

The Contractor shall not install nor backfill culverts between December 15th and April 1st without written permission. Installing shall begin at the downstream end of the culvert line. Bell or groove culvert ends shall be placed facing downstream.

The elliptically shaped culvert shall be placed with the major axis within 5 degrees of the horizontal.

Joining Culverts:

The method of joining rigid culvert sections shall be such that the ends are fully entered and the inner surfaces are reasonably flush and even. Joints shall be made with Portland cement mortar, Portland cement grout, or butyl sealant.

The pipe ends shall be thoroughly cleaned before the joint is made. Mortared joints shall be made with an excess of mortar to form a bead around the outside of the culvert and finished smooth inside. For grouted joints, molds or runners shall be used to retain the poured grout.

When Portland cement mixtures are used, the completed joints shall be covered to protect against drying.

Method of Measurement: Reinforced Concrete Elliptical Pipe Culvert shall be measured by the length in meter (linear foot) along the invert, laid as directed, complete in place and accepted. Pipe laid in excess of the authorized length will not be included.

Basis of Payment: The accepted quantities of pipe for Reinforced Concrete Elliptical Pipe Culvert will be paid for at the contract unit price per meter (linear foot), for the size specified, complete in place.

No payment will be made for pipe ordered without written approval of the Engineer when such pipe is not required to be installed for completion of the work.

Excavation for Reinforced Concrete Elliptical Pipe Culvert, including excavation below the pipe, and for bedding and backfilling will be measured and paid for as provided in Section 206- Structural Excavation.

Whenever minimum cover material extends above the subgrade, removal of the cover material necessary to complete the work will not be paid for directly but shall be considered part of the work specified herein.

Joint material will not be paid for separately but shall be considered included in the unit bid price for the pipe.

Payment will be made under:

Pay Item number		Pay Unit
603.911	60 inch x 38 inch Reinforced Concrete Elliptical Culvert Pipe	linear foot

Dixfield
4329.40
Feb. 10, 2003

SPECIAL PROVISION
Section 610

VEGETATED RIPRAP

Description

Vegetated riprap is used to protect and stabilize embankment soils from the erosive forces of flowing water and piping forces resulting from groundwater seepage. A well designed vegetated riprap system should consist of the following:

- a filter layer of gravel designed to prevent soil movement into or through the riprap layer while allowing water to drain from the embankment
- a stone layer of appropriate gradation and thickness to resist the velocity and shear forces of the watercourse.
- a matrix of live, woody vegetation that reinforces subgrade soils and helps lock the riprap in place

Effective Uses and Limitations

When properly designed and installed, vegetated riprap is an effective method of erosion control where native soil conditions are subject to erosion under design flow conditions. Some common areas of vegetated riprap applicability are:

- diversion channel banks and/or bottoms
- roadside ditches
- drop structure outlets and outfall channels
- laterally expanding channel banks threatening infrastructure or personal property
- small shallow slope failures

Properly graded vegetated riprap forms a flexible, self-healing cover, which can be easily repaired in localized areas.

Material Specifications

Filter Layer: The thickness of the filter should not be less than 4 inches (10 cm). Generally, filters that are up to one-half the thickness of the vegetated riprap layer are satisfactory. Aggregate filters should be designed to have higher porosity than the native soil face of the excavation, but less porosity than the gradation of the riprap face. Under no circumstances should a geotextile fabric be used as a filter.

Riprap: The gradation range or weight, and thickness, of stone for riprap should be based upon resistance of the design flow velocity and shear stress as determined through detailed study of channel conditions. Riprap should be installed at a maximum slope of 1.5H:1V.

Vegetation: Live dormant cuttings with a diameter between 0.75 and 1.5 inches (2 to 4 centimeters), long enough to reach below the base of the riprap, and preferably close to the groundwater table, should be used. At least 1 foot (0.3 meters) should be exposed to sunlight. Live stakes should be kept covered and moist at all times and should be placed in cold storage if more than a few hours elapse between the cutting and replanting times. Live stakes should be cut from fresh, green, healthy, dormant parent plants which are adapted to the site conditions whenever possible. Commonly used woody plants include willow shrubs, dogwood, and alder due to versatility, high growth rates, fibrous root systems, and high transpiration rates when in leaf. Bare root material can also be used, especially for the summer construction season outside of the spring and fall dormancy periods. Basal ends of live stakes or roots of bare root stock should be in contact with native or imported topsoil under the filter and riprap layer.

Installation Guidelines

All erosion and sediment control treatments, including dewatering devices, should be implemented before installation of vegetated riprap. The recommended construction procedure for vegetated riprap is as follows:

1. Excavation should be made in conformity with the existing stream slope and bed or as specified on the design plans.
2. Subgrade cut or fill should be compacted to a density approximating that of the surrounding undisturbed material.
3. A toe trench should be cut to anchor or key in the riprap at the stream bed to provide protection against undermining.
4. The filter layer should be placed immediately after preparation. The stone for granular filters should be spread in a uniform layer to the specified depth. Where more than one layer is specified, they should be spread such that there is minimal mixing.
5. Riprap placement should begin at the toe. Larger stones, as specified by the design gradation, should be placed in the toe trench. The riprap should be placed with suitable equipment to produce a reasonably graded mass of stones. Stone should not be dropped from a height that causes damages to the filter layer or causes impact segregation and sorting of riprap sizes. Stone should be reasonably tamped in place with suitable equipment.
6. Any excavation voids existing along the edges of the completed slope and channel protection should be backfilled and compacted.
7. Live stakes and cuttings should be installed with the bark intact, side branches cleanly removed, and the basal ends angled for easy insertion, and the tops cut square. The cuttings should be implanted with the angled basal end down and buds oriented up at a minimum angle of 10 degrees to the horizontal so that rooting will not be restricted. All stakes should be positioned above the normal baseflow level. In soft soils, the stakes can be inserted perpendicularly into the slope using a dead blow hammer. In hard soils, however, a steel rod should be employed to create a pilot hole before the stakes are planted. Twenty percent of the live stake, and a minimum of two lateral buds, should be exposed above the slope so that green, leafy shoots will readily grow.

8. Stakes should be installed within and along the the upper edge of the riprap face. After the stakes have been inserted, additional topsoil should be tamped firmly around their bases as necessary.
9. Successive stakes should be arranged in a random configuration and spaced a distance of 2 to 3 feet (0.6 to 0.9 meters) apart, allowing for a typical density of 2 to 4 cuttings per square yard (0.8 square meters).
10. All remaining disturbed areas should be permanently stabilized in accordance with approved restoration and planting plans.

Pay item includes all labor and incidentals needed to complete the work under this item.

Pay Item:

610.10	Vegetated Riprap	CY

Dixfield
4329.40
Feb. 10, 2003

SPECIAL PROVISION
Section 610

RIVER STONES - RIFFLES

Description

Constructed riffles are designed to mimic the relative high gradient rocky inflection points along a meandering stream, between successive pool features. Riffles are generally a mix of graded boulder, cobble, or gravel sized stone and void filling sediment.

Effective Uses and Limitations

Riffles are either designed as a component of new natural channel design or as a rehabilitation technique in an existing channel. Constructed riffles are effectively used to:

- mimic natural grade control and energy dissipation of a natural stream
- provide aeration of flow
- provide diversity of substrate for fish habitat, specifically spawning and feeding zones
- provide bed armouring and prevention of headcutting incision

Riffles are not intended to provide the same function of traditional bank armouring, using treatments such as riprap. Constructed riffles must be carefully designed using integrated analysis of channel slope, section, and planform. Riffles are not necessarily an appropriate restoration feature in excessively steep or low gradient, or excessively high bedload channels. Riffles are also not appropriate in bedrock controlled channels.

Material Specifications

Riffle materials are composed of angular or rounded quarry stone, or recycled alluvial materials in the project location. Limestone rock is the most common form of quarried or natural stone used for riffles. Angular limestone is traditionally referred to as riprap while rounded is commonly referred to as riverstone. High density granite, and dolomite, are also used but low density friable shale should not be used. Angular stone generally provides a greater degree of surface contact imbrication and stability versus rounded stone. Rounded stone, however, generally mimics the natural geology of alluvial watercourses. Angular stone can generally be sized smaller than rounded stone for given velocity and shear stress conditions. Riffles are commonly installed with a bedding or filter layer of smaller aggregate, and the overall gradation of riffle stone should be

enhanced with an admixture of void filling gravel and smaller sediment, to prevent piping of flow.

Installation Guidelines

All erosion and sediment control treatments, including dewatering devices, should be implemented before installation of riffles. The recommended construction procedure for riffles is as follows:

1. Excavation of the riffle base, below final grades, should be made in conformity with the specified design plans.
2. The subgrade cut should be inspected for bearing strength and if necessary machine compacted to a density approximating that of the surrounding undisturbed material.
3. The filter layer should be placed immediately after preparation. The stone for granular filters should be spread in a uniform layer to the specified depth. Where more than one layer is specified, they should be spread such that there is minimal mixing.
5. Riprap or riverstone should be systematically placed from the centre of the channel to the outer edges. Larger stones, as specified by the design gradation, should be placed at the riffle crest as best as possible. The stone should be placed with suitable equipment to produce a reasonably graded mass of stones. Stone should not be dropped from a height that causes damages to the bedding layer or causes impact segregation and sorting of stone sizes. Stone should be reasonably tamped in place with suitable equipment. Infill void reducing stone should be either mixed with the main gradation in advance of placement or should be spread on top of the placed stone. The final alignment of riffle stone should maintain a low flow path through the centre of the feature.
6. Any excavation voids existing along the edges of the completed riffle should be backfilled and compacted.
7. All remaining disturbed areas should be permanently stabilized in accordance with approved restoration and planting plans.

Pay Item includes all labor and incidentals needed to complete the work under this item.

Pay Item:

610.21	River Stones – Riffles	CY

Dixfield
4329.40
Feb. 10, 2003

SPECIAL PROVISION
Section 621

BRUSH LAYERING

Description

Brush layers are live branch cuttings interspersed between layers of compacted soil in the face of a cut or fill slope, designed to provide stability and act as horizontal slope drains.

Effective Uses and Limitations

Live brush layers effectively:

- provide long-term durability and erosion control
- trap organic debris and slow sheet flow thereby reducing erosion
- act as lateral drains to dry excessively wet sites
- reinforce newly constructed fill slopes
- stabilize deep-seated mass stability problems
- furnish cover for wildlife

To improve their effectiveness, brush layers can be used in combination with rock toe protection and other restoration measures. Brush layering is usually more effective on fill slopes than cut slopes because branch length is not restricted by the depth to which benches can be dug. Cut brush layering should be limited to slopes of 1.5H:1V or less. When used as live gully repair, brush layers should only be used to repair relatively small slumps and holes.

Material Specifications

Live branches should be cut from fresh, green, healthy, dormant parent plants which are adapted to the site conditions whenever possible. Live branches should be 3/8 to 1.5 inches (1 to 3.5 centimeters) in diameter and should be long enough so that 1/2 to 2/3 of the branch is in contact with the soil at the back of the terrace, bench, or gully while projecting slightly from the slope face or stream bank. Bare root stock can also be used in some circumstances. Commonly used woody plants for this measure include willow shrubs, dogwood, and alder due to versatility, high growth rates, fibrous root systems, and high transpiration rates. Live branch cuttings should be kept covered and moist at all times and should be placed in cold storage if more than a few hours elapse between the cutting and construction times. Live or inert stakes used for live gully repair should be

sufficiently long to reach 3 feet (0.9 meters) into competent soil at the base of the slump or hole and soaked for 24 to 48 hours prior to installation.

Installation Guidelines

All erosion and sediment control treatments, including dewatering devices, should be implemented before installation of brushlayers. The recommended construction procedure for brushlayers is as follows:

1. Brush layer installation should occur during periods of low flow beginning at the rivers edge. A stable riprap toe with a granular filter must first be constructed below the normal baseflow level according to riprap sizing and installation guidelines.
2. Live cuttings should be placed on prepared earth lifts for fill brush layering or excavated terraces for cut brush layering, with 4" minimum of topsoil respectively. Fill brush layers should be positioned on prepared earth lifts 7 to 17 feet (2 to 5 meters) in width, and cut brush layers should be arranged on trenches with a minimum width of 3 to 7 feet (1 to 2 meters). The brush rows should be angled away from the contour on excessively wet sites, and the angle of the branches from the horizontal should range from 10 to 20 degrees; steeper for wetter soils and flatter for dry soils.
3. Branches should be arranged in a crisscross fashion in 4 to 12-inch (10 to 30 cm) thick layers with their cut ends touching the back of the slope or gully. Live gully repair requires that the branch cuttings be arranged around wooden stakes. The wooden stakes should be spaced 1 to 1.5 feet (0.3 to 0.45 meters) apart and driven a minimum of 2 to 3 feet (0.6 to 0.9 meters) into competent ground.
4. A maximum of 25 percent of the brush layer should protrude from the slope face.
5. Moist backfill should be lightly compacted on top of each layer of branches to eliminate air voids and provide an adequate soil/branch interface to initiate growth. Each layer of backfill should have a thickness of 6 to 12 inches (0.15 to 0.30 meters).
6. Subsequent rows of brush layers should be spaced as follows, though frequently wet and unstable slopes may require closer spacing:

Slope	Contour Spacing
1.5:1 to 2:1	4-5 ft (1.2-1.5 m)
2:1 to 2.5:1	5-6 ft (1.5-1.8 m)
2.5:1 to 3:1	6-8 ft (1.8-2.4 m)
3:1 to 4:1	7-10 ft (2.1-3.0 m)

7. The completed installation should match the existing slope profile. Long straw or mulching material should be used between brush layer rows on slopes of 3H:1V or flatter to impede surface erosion until native vegetation invades the area. On steeper slopes, jute or coir fabric should be used.
8. All disturbed areas should be permanently stabilized in accordance with approved restoration and planting plans.

Pay Item includes all labor and incidentals needed to complete the work under this item. Brush Layering will be used in place of Deciduous Shrubs on an as needed basis depending upon specific site conditions. The Resident will be responsible for determining the use of Brush Layering on the project.

Pay Item:

621.54	Deciduous Shrubs	Each

Dixfield
4329.40
Feb. 10, 2003

SPECIAL PROVISION
Section 621

RESTORATION PLANTING

Description

Restoration planting is used for vegetative stabilization and naturalization of natural channel designs, and related construction disturbed riparian areas. Planting plans are the tools used to guide restoration efforts.

Effective Uses and Limitations

Restoration planting can be used to mitigate and compensate for loss of vegetation due to construction of channel designs. In turn, vegetation can be directly integrated as biotechnical reinforcement of channel banks and related slopes. Planting can also be used to rehabilitate existing sites that have been altered by previous activities. Restoration planting is based on use of native species and determination of moisture conditions, soil types, nutrients, and microclimate for the project site. Planting is effectively used to replicate early stage succession in the life of a vegetation community. It can thus also support the recovery of wildlife. Restoration planting cannot, however, be used to achieve an end result comparable to several years or decades of natural growth, succession, and nutrient cycling.

Material Specifications

Plant Material: All plant material shall be nursery grown stock unless otherwise noted. All plant material shall be native and no species substitutions or cultivars are acceptable. All plants shall be well furnished with living foliage or buds (depending upon the season of installation) and be of normal colour during the growing season. Plant material shall not be collected or dug from native stands or established woodlots. Plant material shall not be cut back from larger sizes to meet the material requirements. Sizes as indicated are the minimum allowable after pruning. The seed source of the specified plant material and the plant material itself shall be supplied from no more than one hardiness zone difference from the hardiness zones in the contract.

Topsoil: Topsoil shall be free of stones greater than 2 inches in diameter, subsoil, refuse or other extraneous material and be capable of sustaining healthy plant growth. Topsoil that is in a frozen or muddy condition shall not be used. Topsoil may be imported (triple mix or approved equal) for the

purpose of mixing with native soil at a ratio of 50:50, only if native soil consists of heavy clay subsoil with very little organic material.

Fertilizer: Fertilizer used at the time of planting shall be in granular form, dry, free flowing, free of lumps and shall consist of superphosphate, with a minimum analysis of 20% phosphoric acid.

Installation Guidelines

Terrestrial planting shall be performed under the following conditions:

Bare Root: Spring frost-free conditions, when the temperature is between 0-65^0 F, and winds are less than 15 mph.
Plug, Balled and Burlapped or Container Grown Trees and Shrubs: Spring frost-free conditions, to June 30; and from September 15 to either November 7 or until frost has penetrated the soil to a depth of 2 inches, whichever is reached first.
Live Stakes: Spring frost-free conditions to bud break, and from fall dormancy until frost has penetrated the soil to a depth of 2 inches.
Aquatic Species (potted): Spring frost-free conditions to ice formation on water surface.

Container grown or balled and burlapped plant material of the same species, variety, and size, can be substituted, in order to extend the planting time period for bare root plants in non-flood prone areas. Planting shall be no closer than 6 feet from existing trees. Plant material deemed unacceptable will be rejected. All plant material shall be inspected in a timely manner upon planting completion. Root systems of bare root material shall be kept moist at all times. Bare root material shall not be stored on the site longer than 8 hours unless properly 'heeled in' and kept moist in a shaded and protected area. Plant material shall not be stored on the contract site unless the rootball and/or container and/or live stakes are kept moist. Submergent and emergent aquatic species shall be stored in a minimum of 2 inches of water to maintain hydric soil conditions.

Shrub and plug planting pits shall be excavated in a random pattern within the planting area. Shrubs and plugs are not to be planted in straight lines, unless specified. The bottom of all planting pits shall be protected from freezing. The sides of the planting pit shall be gently tapered and scarified so that water and roots can readily penetrate. All planting pits for bare root material shall be excavated and prepared to accommodate the size of the root system. Planting pits for bare root stock shall have 1-2 shovels (scoops) of topsoil placed into the bottom of the pit prior to tree and shrub installation. Granular fertilizer shall be applied at the time of planting and as directed by the manufacturer. All trees and shrubs shall be placed in the planting pit so that their normal root crown is level with existing grade. Plant material supplied in fibre pots or equivalent shall have the top two-thirds of the pot removed prior to planting. Plant material supplied as bare root shall be placed so that the roots lie in their natural position. The planting pit shall be backfilled with topsoil and firmly tamped, taking care not to injure the root system. Air pockets shall not be allowed to form when backfilling. When the planting pit has been backfilled to existing grade, a small earth berm shall be formed around each planting pit. The berm may be formed from the excavated material. This berm will serve to retain

water over the root area. If the pit is on a slope, the lower edge and sides shall be built up to catch and hold water.

Live stake installation shall involve the placement of live rootable cuttings into the ground. Care shall be taken to ensure that live stakes are not planted upside down. Live stakes shall be installed by gently inserting the stake directly into the ground, provided severe damage does not occur to the bottom of the stake. If the soil has become hardened, or live stake insertion proves difficult, a dibble (or equivalent) with a diameter slightly larger than the live stake, may be used to create a cavity in the ground. The live stake will be inserted and tamped to fit snugly within the cavity. The ground surrounding the live stake shall be tamped firmly into place after live stake installation.

Initial watering of all plant material shall be completed immediately after planting, with the exception of aquatic plants. Sufficient water shall be applied to each plant to thoroughly soak the root zone. Initial watering will be completed in such a manner so as to prevent standing water around individual plants and/or over-saturation of the soil. Water shall be uniformly applied to each plant.

All deciduous and coniferous trees larger than 5 feet in height shall be staked immediately following planting to ensure vertical alignment and plant stability. Trees less than 5 feet in height do not require staking. Stakes are to be located away from tree trunks, on the side of prevailing wind. Main roots shall not be damaged when installing stakes. Rubber hose shall be used as a cover over tie wires to protect the tree bark from damage. The rubber hose shall be cut to sufficient length to loosely encircle the tree trunk and be twisted at least once.

Upon the completion of planting of each deciduous tree or shrub, pruning shall be carried out to remove dead, broken or injured branches. The natural shape or habit of the plant shall not be changed. Coniferous trees shall be pruned only to remove dead, broken or injured branches. Protective guards shall be installed around all trees larger than 5 feet to prevent rodent damage.

Trees larger than 5 feet in height shall be protected using one of: hardware cloth wire mesh guard; plastic drainage pipe; or spiral plastic tree wrap.

At the completion of planting operations, all areas disturbed or damaged shall be restored to their original condition, including, but not restricted to clean-up and regrading, re-installing erosion control blankets, and seeding/sodding and mulching.

Warranty and Monitoring

The duration of the maintenance and warranty phase shall be 2 consecutive years following the date of acceptance. The warranty shall cover any defects in material and workmanship. Any plant material that is found to be unacceptable within the duration of the maintenance and warranty period shall be replaced.

Plant material shall be considered acceptable when it is turgid, structurally sound, shows adequate growth and formation of buds, and is free from blight of any description. Plant material that does not meet this condition or has 'died back' and regrown from a shoot or bud shall be considered unacceptable.

Monitoring of all planting restoration should continue for a third consecutive year. Vegetation monitoring should be integrated with geomorphic monitoring. Monitoring should determine that overall channel, and riparian, form and function has been achieved as based on the original project goals and objectives.

Restoration Planting will be incidental to the 621 Items in the contract.

Dixfield
PIN 4329.40
Date: 5/09/03

Special Provision
621
Planting Season

621.0020 Planting Time; Add the following Statement

Plant installation time for bioengineering material will be determined by the Contractor's schedule, as approved by the Resident inspector.

Dixfield
4329.40
Feb. 10, 2003

SPECIAL PROVISION
Section 631

ALL PURPOSE EXCAVATION - POOLS

Description

Constructed pools are designed to mimic natural scour features, generally on the outside of a bend, in a stream or river. They are mainly targeted as an integrated component of riffle-pool sequencing along a new natural channel design or a rehabilitated existing channel. Pools can also be the intended end result feature of constructed deflector structures.

Uses and Limitations

Constructed pools provide the following functions in a natural channel system:

- well developed pools are primary habitat and refuge features for various life stages of many fish species, and aquatic invertebrates
- integrated pool-riffle sequencing provides natural attenuation of stream energy, towards a dynamic equilibrium of sediment load and flow regime

Constructed pools are generally limited to alluvial and semi-alluvial channels, and should not be excavated in bedrock channels. Constructed pools may be subject to adverse infilling in low energy and high bedload systems. Pools need to be carefully designed to avoid undersizing which might be subject to additional erosion and bank migration.

Material Specifications

Constructed pools in a true low gradient natural channel design are excavated in native material and reinforced by only the biotechnical protection of existing or planted vegetation. Pools can be enhanced by the placement of boulders and large woody debris habitat features for fish. In high gradient step-pool or cascade-pool channels, pools need to be designed to withstand high velocity and shear stress forces and are usually shaped and armoured accordingly with properly sized stone. Step or cascade-pools are commonly installed with a bedding or filter layer of smaller aggregate, and the overall gradation of stone should be enhanced with an admixture of void filling gravel and smaller sediment, to prevent piping of flow.

Installation Guidelines

All erosion and sediment control treatments, including dewatering devices, should be implemented before construction of pools. The recommended construction procedure for pools is as follows:

1. Excavation for an unlined pool should be made in native materials, in conformity with the final grades shown on the design plans.
2. The density and compactness of the native material excavation should be compared to surrounding material and any necessary compaction should be done with appropriate equipment.
3. For step or cascade-pool channels, excavation of the pool base, below final grades, should be made in conformity with the specified design plans.
3.1 The subgrade cut should be inspected for bearing strength and if necessary machine compacted to a density approximating that of the surrounding native material.
3.2 The filter layer, if necessary, should be placed immediately after preparation. The stone for granular filters should be spread in a uniform layer to the specified depth. Where more than one layer is specified, they should be spread such that there is minimal mixing.
3.3 Riprap or riverstone, if necessary (note: step/cascade pools may be constructed in native materials under certain design conditions), should be systematically placed from the centre of the pool to the outer edges. The stone should be placed with suitable equipment to produce a reasonably graded mass of stones. Stone should not be dropped from a height that causes damages to the bedding layer or causes impact segregation and sorting of stone sizes. Stone should be reasonably tamped in place with suitable equipment. Infill void reducing stone and sediment should be either mixed with the main gradation in advance of placement, or should be spread on top of the placed stone.
4. Pools constructed in dewatered conditions should be allowed to fill naturally with rainwater and groundwater to help balance pore water pressure and reduce slumping of the banks.
5. Any excavation voids existing along the edges of the completed pool should be backfilled and compacted.
6. All remaining disturbed areas should be permanently stabilized in accordance with approved restoration and planting plans.

Pay Item includes all labor and incidentals needed to complete the work under this item.

Pay Item:

631.12	All Purpose Excavator including Operator	Hour

SPECIAL PROVISION
SECTION 652
MAINTENANCE OF TRAFFIC

Approaches. Approach signing shall include the following signs shown on the Standard Maintenance of Traffic in Construction Zones for "Project Approach Signing" - Two Way Traffic.

Road Work Ahead
Road Work 1000 Feet
Road Work 500 Feet

Work Area. At each work site, signs and channelizing devices as shown on the Standard Maintenance of Traffic in Construction Zones shall be used as directed by the Resident.

Signs include:

Work Area Ahead
Work Area
Flagger Sign
Shoulder Work Ahead

The above lists of Approach signs and Work Area signs are representative of the contract requirements. Other sign legends may be required.

The Contractor shall provide a minimum roadway width of 24 feet for two way traffic at all times.
Work areas shall be restricted to the paved shoulders and any temporary lane closure shall be approved by the Department.

Channelization. Channelization devices shall include the following:

Cones

Channelization devices shall be installed and maintained at the spacing determined by the MUTCD through the work area.

Roadside Recovery Area. The Contractor shall not store material nor park equipment within 5 m [15 feet] of the edge of the established travel lanes. Equipment parked overnight within 8 m [25 feet] of the edge of the travel lane shall be clearly marked by channelizing devices or other reflective devices.

SPECIAL PROVISION
SECTION 656
Temporary Soil Erosion and Water Pollution Control

The following is added to Section 656 regarding Project Specific Information and Requirements. All references to the Maine Department of Transportation Best Management Practices for Erosion and Sediment Control (a.k.a. Best Management Practices manual or BMP Manual) are a reference to the latest revision of said manual. The "Table of Contents" of the latest version is dated "1/19/00" (available at http://www.state.me.us/mdot/mainhtml/bmp/bmpjan2000.pdf.) **Procedures specified shall be according to the BMP Manual unless stated otherwise.**

Any and all references to "bark mulch" or "composted bark mix" shall be a reference to "Erosion Control Mix" in accordance with *Standard Specification, Section 619 - Mulch.*

Project Specific Information and Requirements

The following information and requirements apply specifically to this Project. The temporary soil erosion and water pollution control measures associated with this work shall be addressed in the SEWPCP.

1. This project is in South Branch of the Sandy Rover, which is listed as a Class AA stream and is considered **SENSITIVE** in accordance with the BMP Manual. The Contractor's SEWPCP shall comply with Section II.B., Guidelines for Sensitive Waterbodies in the BMP Manual.
2. A preconstruction field review is mandatory for this project. The preconstruction field review shall take place before commencing any work that involves soil disturbance or potential impacts on water quality. Attendees shall include the Environmental Coordinator, the preparer of the SEWPCP, the Resident, and a representative from the Department's ENV Water Resources Unit. The date and time shall be set by the Contractor in consultation with the Construction Manager and ENV Water Resources Unit representative.
3. Newly disturbed earth shall be mulched by the end of each workday. Mulch shall be maintained on a daily basis.
4. Permanent soil stabilization measures shall be applied within one week of the last soil disturbance.
5. After November 1 the Contractor shall use winter stabilization methods, such as Erosion Control Mix as specified in *Standard Specification, Section 619 - Mulch.* If required, spring procedures for permanent stabilization shall also be described in the plan. Use of this product for over-winter temporary erosion control will be incidental to the contract and be paid for as part of Pay Item 656.75.
6. Stream flow shall be maintained at all times.
7. The SEWPCP shall describe sequencing of cofferdam installation and removal as well as the dewatering procedures.

SPECIAL PROVISION
SECTION 656
Temporary Soil Erosion and Water Pollution Control

8. If a cofferdam sedimentation basin is used for the cofferdams. The basin shall be located in an upland area where the water can settle and seep into the ground or be released slowly to the resource in a manner that will not cause erosion. The location of such a cofferdam sedimentation basin shall be addressed in the SEWPCP.